

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently Amended)** A method of operating an on-the-shelf inventory management system, the inventory management system having a current reporting period table that has a number of rows, a number of columns, and a number of fields, each field having an initial value, comprising a processing system including a distributed memory and a plurality of data collection devices for collecting data from one or more store locations, the method including comprising the steps of:

collecting a plurality of transaction data blocks; blocks from one or more of the data collection devices, the data blocks including point-of-sale information;

constructing a temporary table having a plurality of fields that correspond with the current reporting period table, and processing the plurality of transaction data blocks to determine a calculated value for each field in the temporary table;

adding each calculated value of a field in the temporary table to an existing value in a corresponding field in the current reporting period table; and

determining, for each item in the current reporting period table, if an alert condition exists, and issuing an alert when an alert condition exists.

updating a table of transactional data in the memory based on certain of the data blocks, wherein the certain data blocks are associated with a reporting period; and

issuing an alert when information in the certain data blocks satisfies predetermined criteria, wherein the issued alert identifies conditions and sources of information satisfying the predetermined criteria, and wherein the predetermined criteria are different for each of out-of-stock conditions, missing sign conditions, blocked shelf conditions and product-to-the-back-of-the-shelf conditions.

2. **(Currently Amended)** The method of claim 1 and further comprising the step of returning to the collecting step to collect a next plurality of transaction data blocks, obtaining data associated with a series of reporting periods by iteratively repeating the steps of collecting, updating and issuing, wherein statistical information derived by analyzing the series is used to quantify certain of the predetermined criteria.

3. **(Currently Amended)** The method of claim 1 wherein the table includes a plurality of fields, each field characterizing aspects of one or more items for sale, and further comprising the steps of:

initializing each field in the current reporting period table before the collecting step; and determining if a current reporting period is over; when the current reporting period is not over, returning to the collecting step; and when the current reporting period is over, returning to the initializing step.

4. **(Canceled)**

5. **(Currently Amended)** The method of claim 4 and further comprising the steps of: claim 3, wherein the step of collecting includes:

receiving data blocks from the data collection device when a selected number of data blocks is available; and
receiving any remaining data blocks from the data collection device at the conclusion of the reporting period.

determining if a number of transaction data blocks have been stored in an external memory;
copying the transaction data blocks from the external memory to an internal memory when the number of transaction data blocks have been stored in the external memory;
determining whether an nth time period has expired after the transaction data blocks have been copied, or when the number of transaction data blocks has not been stored in an external memory;
returning to the determining step when the nth time period has not expired; and
moving to the constructing temporary table step when the nth time period has expired.

6. **(Canceled).**

7. **(Currently Amended)** The method of claim 1 wherein the determining, for each item step includes the steps of: the step of issuing an alert includes:

outputting a database request to a database;
receiving a measurement number from obtaining one or more measurements from information in the database;
comparing the measurement number with an existing value one or more measurements with existing values in the current reporting table to form a difference value; values; and

~~determining whether the difference value falls within a predetermined acceptance range;~~

~~and~~

~~issuing an alert command when the difference value does not fall with the values do not fall within predetermined acceptance range ranges.~~

8. **(Canceled)**

9. **(Currently Amended)** The method of ~~claim 7~~ claim 8 and further comprising the steps of:

determining whether an alert command has been received, the alert command identifying an item;

when an alert command is received, determining whether the item identified by the alert command has been blocked;

when the item has not been blocked, issuing an alert.

10. **(Original)** The method of claim 9 wherein the alert includes a page.

11. **(Original)** The method of claim 9 wherein the alert includes an e-mail.

12. **(Original)** The method of claim 9 and further comprising the step of adding an identifier and a time stamp to an alert log to record the alert.

13. **(Original)** The method of claim 12 and further comprising the steps of:

determining whether a response to an alert has been received;

when a response to an alert is received, identifying the sender, determining a type of response, and adding a record to the alert log;

determining whether the response is of a predetermined type; and

when the response is of the predetermined type, adding the item that corresponds with the alert to a blocked log.

14. **(Original)** The method of claim 13 wherein the predetermined type includes an out-of-stock condition.

15. **(Original)** The method of claim 13 and further comprising the steps of:

determining whether an alert has been received;

when an alert has been received, inspecting a shelf location that corresponds with the item that corresponds with the alert;

selecting a descriptor to describe a condition of the shelf location;

transmit descriptor back to alert device; and

taking necessary corrective action.

16. (Original) The method of claim 1 and further comprising the steps of:
determining whether an alert has been received;
when an alert has been received, inspecting a shelf location that corresponds with the item that corresponds with the alert;

selecting a descriptor to describe a condition of the shelf location;
transmitting the descriptor back to the alert device; and
taking necessary corrective action.

17. (Original) A method of operating an on-the-shelf inventory management system, the system measuring a number of units of an item that has been sold, and outputting an alert when the number of units of the item that has been sold falls below a statistical measure of a number of units that are expected to have been sold, the method including the steps of:

determining whether an alert has been received;
when an alert has been received, inspecting a shelf location that corresponds with the item;

selecting a descriptor to describe a condition of the shelf location;
transmitting a descriptor back to the system.

18. (Original) The method of claim 17 and further comprising the step of taking necessary corrective action.

19. (Currently Amended) An on-the-shelf inventory management system, the system comprising an inventory management server and a plurality of data collection devices, the system having providing a current reporting period table that has a number of rows, a number of columns, and a number of fields, each field having an initial value, the system comprising:

a computer having:

means for collecting a plurality of transaction data blocks;

means for constructing a temporary table having a plurality of fields that correspond with the current reporting period table, and processing the plurality of transaction data blocks to determine a calculated value for each field in the temporary table;

means for adding the calculated value for each field in the temporary table to an existing value in each corresponding field in the current reporting period table; and

means for determining, for each item in the current reporting period table, if an alert condition exists, and issuing an alert when an alert condition exists.

20. (New) An on-the-shelf inventory management system, the system providing information associated with transactions in one or more retail stores, comprising:
 - a server for receiving transactional data related to the one or more retail stores, the server being adapted to maintain the data in a database;
 - a transaction processor for arranging the data into a plurality of fields and for accumulating received in a selected time period and recording the accumulated data in a reporting table, wherein the reporting table is indexed by time period;
 - an alert generator for monitoring the reporting table and generating alerts based on criteria related to the accumulated data in the reporting table, the criteria including minimum inventory levels;
 - a plurality of inventory management computing devices in the one or more retail stores for generating the transactional data and transmitting the transactional data to the server; and
 - a plurality of electronic devices configured to receive the alerts.